



SYSTEMS
DEVELOPMENT
MATERIALS



**Drugs and Medical
Supplies System Workbook**

**General Supplies System
Workbook**

**Facilities and
Equipment Maintenance
System Workbook**

**Transportation System
Workbook**

35 VOLUMES

"... A TOTAL TEACHING SYSTEM."
World Health Forum, Vol. 4, 1983



THE MEDEX PRIMARY HEALTH CARE SERIES

After completion of extensive field trials in Micronesia and in primary health care programs in Lesotho, Guyana, Pakistan, and Thailand, the methods and materials of the MEDEX technology have been published as The MEDEX Primary Health Care Series. The Series provides a systematic, practical, adaptable format for management and training in new or existing primary health care programs at all levels.

The 35-volume Series is organized into three major categories of Management Systems Development

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- 16** Student Text **17** Instructor's Manual Skin Dental, Eyes, Ears, Nose, and Throat

- 18, 19** Student Text **20** Instructor's Manual Infectious Diseases Other Common Problems

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- 21** Student Text **22** Instructor's Manual Prenatal Care Labor and Delivery

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- 28** Formulary Diagnostic and Patient Care Guides

- 29** Patient Care Procedures

- 30** Health Center Operations

- 31** Community Health

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The Community Health Worker Training Materials are designed for training literate and non-literate community health workers to carry out specific tasks. The teaching approach emphasizes dialogue between trainer and trainee. Other methods employed include role-play, demonstrations, stories, and extensive use of visual aids. The materials are geared to practical skill development through maximum interaction with the trainer. The workbooks emphasize promotive and preventive skills, but include selected basic curative skills as well.

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DRUGS AND MEDICAL SUPPLIES
SYSTEM WORKBOOK

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The MEDEX Primary Health Care Series

COMMUNITY
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DRUGS AND MEDICAL SUPPLIES SYSTEM WORKBOOK

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Health Manpower Development Staff

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Prepared for _____

Prepared by _____

Date completed _____

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Ordering List for Workbook Forms

- Form 1: LIST OF PERSONS INTERVIEWED —
Form 2: LIST OF DOCUMENTS REVIEWED —
Form 3: SCHEDULE FOR THE MONTH
OF _____
- Form 4: WORK FLOW ANALYSIS
Form 5: INVENTORY OF DRUGS AND MEDICAL
SUPPLIES
- Form 6: PROCEDURES FOR REQUISITIONING,
RECEIVING, AND STORING DRUGS AND
MEDICAL SUPPLIES
- Form 7: LOCAL PURCHASING PRACTICES
Form 8: RESOURCES OF THE DRUGS AND
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- Form 9: PROCEDURES FOR ORDERING AND
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- Form 22: ANALYSIS OF FORCES AFFECTING
CHANGE
- Form 23: ALTERNATIVE PROBLEM-SOLVING
APPROACHES
- Form 24: ALTERNATIVE RECOMMENDATIONS FOR
CONCLUSION _____

INTRODUCTION

SECTION 1

USING THE MANAGEMENT SYSTEM WORKBOOK

This is one of eight workbooks in a series designed to guide you in analyzing the management systems needed to support the delivery of primary health care services. The eight management support systems are:

Drugs and Medical Supplies	Communication	Health Information
General Supplies	Personnel	
Facilities and Equipment Maintenance	Finance	
Transportation		

This workbook will help you conduct a comprehensive study of the drugs and medical supplies system leading to recommendations for improving the efficiency and effectiveness of the system. The drugs and medical supplies system is used to procure, store, distribute, and control the use of drugs and medical supplies.

The management system workbook consists mainly of forms. The forms will help you collect information in a standardized way so that it can be systematically reviewed and analyzed. Instructions for using the workbooks are in the Management Analysis Training Module. The module includes exercises to prepare you to use the workbook forms to conduct an analysis of a management support system. Since management procedures vary for each country's health care system, the workbooks fit no one situation perfectly. Before you begin using a workbook you must adapt it to satisfy the special

conditions in your country or region. You may need to:

- Translate the workbook into the local language
- Change the terminology to reflect local usage
- Limit or expand the scope of the analysis
- Omit certain forms or add new ones
- Revise individual forms
- Combine one or more workbooks

You will summarize the results of your analysis in a report that outlines alternative recommendations for improving the system you have studied. This report will become a reference document in the larger process for management development in your country. This process includes workshops that bring together policy level officials and field personnel who are involved in the operation of the system. These persons review the study report and recommend actions to be taken based on the study recommendations. This effort for strengthening the management support for primary health care services parallels other efforts to upgrade the management skills of primary health care workers in the system. In this way, the workers are provided with the skills they need to make the system function effectively and efficiently, and the system is strengthened to respond to the improved capabilities of the workers.

DESCRIPTION OF STUDY METHODS

Information will be gathered by the following methods:

The information gathered will be validated by the following methods:

Findings and conclusions will be formulated by the following methods:

Alternative recommendations will be formulated by the following methods:

SECTION 2

**INFORMATION SOURCES AND
SCHEDULING OF WORK ACTIVITIES**

Form 1: LIST OF PERSONS INTERVIEWED

Use this form to plan your interview schedule and to keep a record of all the interviews that you conduct. Record the date of the interview and the name, title, address, and telephone number of each person interviewed or to be interviewed. This information will be included as an appendix to your written study report.

DATE	NAME	TITLE	ADDRESS	TELEPHONE

Form 2: LIST OF DOCUMENTS REVIEWED

Record the title, author, publisher, and date of publication for every major written document that you review for your study. Also include the date of the review and the source of the document. The information on this form will be included as an appendix to your written study report and will serve as your reference bibliography.

TITLE	AUTHOR	PUBLISHER/ DATE OF PUBLICATION	DATE REVIEWED	SOURCE OR LOCATION

Form 3: SCHEDULE FOR THE MONTH OF

Use this form to schedule and plan your work activities. Complete a new form for each month.

INFORMATION GATHERING

SECTION 3

Form 4: WORK FLOW ANALYSIS

This is a general use form for recording and analyzing the flow of work activities. Keep extra copies of this form available to supplement the interview and survey forms that follow.

Activity	Begins _____	Ends _____	
Location	Date _____		
PRESENT METHOD			
Step Number	Action	Step Number	Action
PROPOSED METHOD			

Form 5: INVENTORY OF DRUGS AND MEDICAL SUPPLIES

Use this form to inventory all drugs and medical supplies at selected facilities. List items by generic names, followed by trade name, strength, package size, unit of issue, and code number as appropriate. If an item is out of stock, indicate whether or not it is on order. Check the quantity of each item against the facility's inventory record. Note any discrepancies. Also note procedures for dealing with insufficient or excess stock and with fees charged for supplies. Review drug expiration dates and note any expired drugs.

Facility inspected		Location	Date
Community	Health center	Region	Other
Health post	District	Central Ministry of Health	
Population served		Number of service contacts per month	

ITEM	UNIT COST	QUANTITY	SOURCE	PROBLEMS	SUGGESTIONS FOR IMPROVEMENT

ITEM	UNIT COST	QUANTITY	SOURCE	PROBLEMS	SUGGESTIONS FOR IMPROVEMENT

Form 6: PROCEDURES FOR REQUISITIONING, RECEIVING, AND STORING DRUGS AND MEDICAL SUPPLIES

Use this form to describe procedures for requisitioning, receiving, and storing drugs and medical supplies. Attach copies of existing forms used in ordering, receiving, and dispensing drugs and medical supplies. Use Form 4: Work Flow Analysis, to supplement information recorded, as appropriate.

Person interviewed _____	Title _____	Location _____	Date _____
<input type="checkbox"/> Community	<input type="checkbox"/> Health center	<input type="checkbox"/> Region	
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health	
Population served _____		<input type="checkbox"/> Other	
<input type="checkbox"/> Number of service contacts per month _____			
REQUISITIONING PROCEDURES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT	

SUPPLY PROCEDURES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Cold chain:		
	Other:	

STOCK CONTROL PROCEDURES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Inspection against shipping documents for quantity and damage:		
Security against leakage or shrinkage:		
Control for expiration dates:		

STOCK CONTROL PROCEDURES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Security of and accountability for narcotics:		
Adequacy of storage facilities and practices:		
Issuing of supplies within the facility:		

STOCK CONTROL PROCEDURES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Issuing of supplies outside the facility:	Disposal of expired or spoiled supplies:	Other:

Form 7: LOCAL PURCHASING PRACTICES

Use this form to describe procedures for purchasing drugs and medical supplies locally. Attach copies of forms and procedures for local purchase.

Person interviewed _____	Title _____	Location _____	Date _____
<input type="checkbox"/> Community	<input type="checkbox"/> Health center	Region _____	
<input type="checkbox"/> Health post	<input type="checkbox"/> District	Central Ministry of Health _____	
<input type="checkbox"/> Population served		Number of service contacts per month _____	

ITEM	UNIT COST	SOURCE OF FUNDS AND METHOD OF PAYMENT	PROBLEMS	SUGGESTIONS FOR IMPROVEMENT

ITEM	UNIT COST	SOURCE OF FUNDS AND METHOD OF PAYMENT	PROBLEMS	SUGGESTIONS FOR IMPROVEMENT

Form 8: RESOURCES OF THE DRUGS AND MEDICAL SUPPLIES SYSTEM

Use this form to obtain and assess information about the availability and quality of resources to support a drugs and medical supplies system at the health center level and above.

Person interviewed _____	Title _____	Location _____	Date _____
<input type="checkbox"/> Health center	<input type="checkbox"/> Region	<input type="checkbox"/> Other	
<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health		
RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT	
Supply specialist personnel:			
Supply clerical personnel:			
Warehouse and storage facilities:			

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Transportation and distribution capabilities:	Quality control and audit capabilities:	Funds for drugs:

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Funds for medical supplies other than drugs:		
Funds for drugs and medical supplies management:		
Training in drugs and medical supplies management:		
Other:		

**Form 9: PROCEDURES FOR ORDERING AND DISTRIBUTING
DRUGS AND MEDICAL SUPPLIES**

Use this form to trace the steps from the source of drugs and medical supplies to final distribution, with emphasis on procedures followed at each step. Study three randomly selected supply items, such as antibiotics, tranquilizers, and tape, for the most recent complete fiscal year. Select items that are reasonably high in volume, used universally, and of value when used or sold outside the primary health care system. Include opening as well as closing stock levels. Use Form 4: Work Flow Analysis, to supplement information recorded, as appropriate.

Person interviewed _____	Title _____	Location _____	Date _____	Item studied _____
Community _____	Health center _____	Region _____	Other _____	
Health post _____	District _____	Central Ministry of Health _____		
Population served _____		Number of service contacts per month _____		

STEP	PROCEDURE	DATE	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
1.	Opening stock level:			
2.	Order:			
3.	Delivery from central stores:			
4.	Local purchase:			

STEP	PROCEDURE	DATE	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
5.	Inspection against shipping document for quantity and damage:			
6.	Receipt of records:			
7.	Expiration control:			
8.	Redistribution to other locations:			

STEP	PROCEDURE	DATE	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
9.	Closing stock level:			
10.	Return of supplies to ordering source:			
11.	Audit:			
12.	Other:			

Form 10: POLICIES AND ORGANIZATION OF THE DRUGS AND MEDICAL SUPPLIES SYSTEM

Use this form to describe the policies and organization of the drugs and medical supplies system. Attach copies of policy directives, procedures, and organizational charts.

Person interviewed _____	Title _____	Location _____	Date _____
<input type="checkbox"/> Health center	<input type="checkbox"/> Region	<input type="checkbox"/> Other	
<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health		
Population served _____	Number of service contacts per month _____		

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Use of generic equivalencies:		
Use of standardized formularies:		
Procurement:		

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Prediction of future needs:		
In-country manufacture:		
Laboratory quality control testing:		

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Pre-packaging in prescription dosages:	Accountability for quantity control and leakage:	Use of donated supplies:

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Authorized alternative sources, such as local purchase, of supplies:		
Training of health care providers in supply utilization:		
Other:		

ORGANIZATION	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Supervisory chain of command:		
	Delegation of authority and accountability:	
		Centralization versus decentralization:

ORGANIZATION	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Relationships with other organizations:		
User participation in supply management planning and decision-making;		
Other:		

Form 11: VALIDATION OF FORM

Use this form to validate information that you obtain through personal interview. Review the information on the appropriate interview form with persons working at the next higher or next lower organizational levels of the system. Attach this form to the interview form reviewed.

HIGHER ORGANIZATION LEVEL Person interviewed		Title		Location		Date
Comments:						
LOWER ORGANIZATION LEVEL Person interviewed		Title		Location		Date
Comments:						

SECTION 4

OBJECTIVES AND FUNCTIONS OF THE DRUGS AND MEDICAL SUPPLIES SYSTEM

Form 12: OBJECTIVES OF THE SYSTEM

Use this form to record the present and proposed objectives of the drugs and medical supplies system. Using the information you have gathered, describe what the system is now doing and what it should do in the future to adequately support the delivery of primary health care services.

Present objectives:

Proposed objectives:

Form I3: FUNCTIONS OF THE SYSTEM

Use this form as an organizational responsibility chart to help define the scope of the drugs and medical supplies system. In the first column, record all of the functions of the system that you have identified. In the succeeding columns, indicate which aspect of each function is performed by the various organizational levels of the system. Use the following symbols to note the type of responsibility assumed for each function:

- P -- Prepares or reviews an action
- R -- Recommends an action
- A -- Approves an action
- E -- Executes an action
- M -- Monitors an action

FUNCTIONS	COMMUNITY LEVEL	HEALTH POST LEVEL	HEALTH CENTER LEVEL	DISTRICT LEVEL	REGIONAL LEVEL	CENTRAL MINISTRY OF HEALTH LEVEL	OTHER CENTRAL LEVEL



SECTION 5

SUMMARY OF FINDINGS AND CONCLUSIONS

Using Forms 14 to 19

Use Forms 14 to 19 to summarize the information that you have recorded on Forms 5 to 10. Notice that Forms 14 to 19 are similar in format to Forms 5 to 10. This will ease your work in summarizing the information. Use as many extra pages as you need.

Prepare a summary form for each organizational level of the primary health care system. For example, if you gathered information on Form 5 from each of the following organizational levels, you would then prepare six different versions of the same summary form, one for each organizational level:

- Community
- Health post
- Health center
- District
- Central ministry of health
- Other central agency

Form 14: SUMMARY OF FORM 5—INVENTORY OF DRUGS AND MEDICAL SUPPLIES

<input type="checkbox"/> Community	<input type="checkbox"/> Health center	<input type="checkbox"/> Region	<input type="checkbox"/> Other
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health	<input type="checkbox"/>
ITEM	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT	

**Form 15: SUMMARY OF FORM 6—PROCEDURES FOR REQUISITIONING, RECEIVING,
AND STORING DRUGS AND MEDICAL SUPPLIES**

<input type="checkbox"/> Community	<input type="checkbox"/> Health center	<input type="checkbox"/> Region
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health
<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____
REQUISITIONING PROCEDURES		
ISSUES AND PROBLEMS		
SUGGESTIONS FOR IMPROVEMENT		

SUPPLY PROCEDURES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Cold chain:		
Other:		

STOCK CONTROL PROCEDURES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Inspection against shipping documents for quantity and damage:		
Security against leakage or shrinkage:		
Control for expiration dates:		

STOCK CONTROL PROCEDURES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Security of and accountability for narcotics:		
Adequacy of storage facilities and practices:		
Issuing of supplies within the facility:		

STOCK CONTROL PROCEDURES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Issuing of supplies outside the facility:		
	Disposal of expired or spoiled supplies:	
		Other:

Form 16: SUMMARY OF FORM 7—LOCAL PURCHASING PRACTICES

<input type="checkbox"/> Community	<input type="checkbox"/> Health center	<input type="checkbox"/> Region
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health
<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____

ITEM	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT

Form 17: SUMMARY OF FORM 8—RESOURCES OF THE DRUGS AND MEDICAL SUPPLIES SYSTEM

	<input type="checkbox"/> Health center <input type="checkbox"/> District	<input type="checkbox"/> Region <input type="checkbox"/> Central Ministry of Health	<input type="checkbox"/> Other _____
RESOURCES	ISSUES AND PROBLEMS		
Supply specialist personnel:			
Supply clerical personnel:			
Warehouse and storage facilities:			
	Drugs - 1000 Office 6		

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Transportation and distribution capabilities:	Quality control and audit capabilities:	Funds for drugs:

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Funds for medical supplies other than drugs:		
Funds for drugs and medical supplies management:		
Training in drugs and medical supplies management:		
Other:		

**Form 18: SUMMARY OF FORM 9—PROCEDURES FOR ORDERING AND
DISTRIBUTING DRUGS AND MEDICAL SUPPLIES**

		Community <input type="checkbox"/> Health post <input type="checkbox"/>	Health center <input type="checkbox"/> District <input type="checkbox"/>	Region <input type="checkbox"/> Central Ministry of Health <input type="checkbox"/>	Other <input type="checkbox"/>
STEP	PROCEDURE		DATE	ISSUES AND PROBLEMS	
1.	Opening stock level:				
2.	Order:				
3.	Delivery from central stores:				
4.	Local purchase:				

STEP	PROCEDURE	DATE	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
5.	Inspection against shipping document for quantity and damage:			
6.	Receipt of records:			
7.	Expiration control:			
8.	Redistribution to other locations:			

STEP	PROCEDURE	DATE	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
9.	Closing stock level:			
10.	Return of supplies to ordering source:			
11.	Audit:			
12.	Other:			

Form 19: SUMMARY OF FORM 10—POLICIES AND ORGANIZATION OF THE DRUGS AND MEDICAL SUPPLIES SYSTEM

<input type="checkbox"/> Health center <input type="checkbox"/> District	<input type="checkbox"/> Region <input type="checkbox"/> Central Ministry of Health	<input type="checkbox"/> Other
POLICIES		
ISSUES AND PROBLEMS		
SUGGESTIONS FOR IMPROVEMENT		
<p>Use of generic equivalencies:</p>		
<p>Use of standardized formularies:</p>		
<p>Procurement:</p>		

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Prediction of future needs:		
In-country manufacture:		
Laboratory quality control testing:		

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Pre-packaging in prescription dosages:		
	Accountability for quantity control and leakage:	
	Use of donated supplies:	

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Authorized alternative sources, such as local purchase, of supplies:		
	Training of health care providers in supply utilization:	
	Other:	

ORGANIZATION	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Supervisory chain of command:		
Delegation of authority and accountability:		
Centralization versus decentralization:		

ORGANIZATION	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Relationships with other organizations:		
User participation in supply management planning and decision-making:		
Other:		

Form 20: SUMMARY OF FINDINGS AND CONCLUSIONS

Use this form to describe the issues and problems that you have identified in your study. Summarize each issue or problem in the "Findings" column. Assign each conclusion a reference number to link it to the alternative recommendations to be described in Form 24.

Community <input type="checkbox"/>	Health post <input type="checkbox"/>	Health center <input type="checkbox"/>	District <input type="checkbox"/>	Region <input type="checkbox"/>	Central Ministry of Health <input type="checkbox"/>	Other <input type="checkbox"/>
FINDINGS						
CONCLUSIONS						
REFERENCE NUMBER						

FINDINGS	CONCLUSIONS	REFERENCE NUMBER

SECTION 6

PROBLEM-SOLVING

Form 21: STATEMENT OF PROBLEM AND ROOT CAUSES

This is the first of three forms used in the step-by-step problem-solving approach to analyzing and developing solutions to management problems. Use this form to state each problem that you identify and its root causes. The completed form will be the basis for further analysis.

STATEMENT OF THE PROBLEM		ROOT CAUSE(S) OF THE PROBLEM
What is the problem?		1.
When and how often does it occur?		2.
How does the problem affect health management?		3.
How severe is the impact?		
Where does the problem occur?		
Who is affected by the problem?		
Who is responsible for the work activity where the problem occurs?		

Form 22: ANALYSIS OF FORCES AFFECTING CHANGE

This is the second form in the problem-solving approach to solving management problems. Use this form to identify factors that either constrain actions toward reaching a solution or help in reaching a solution. The completed form will be the basis for further analysis.

CONSTRAINING FORCES	HELPING FORCES

Form 23: ALTERNATIVE PROBLEM-SOLVING APPROACHES

This is the third of three forms in the problem-solving approach to solving management problems. Use this form to identify and examine alternative approaches to solving the problems that you have identified. This completed form becomes a reference for developing your final recommendations.

APPROACH	ADVANTAGES	DISADVANTAGES

ALTERNATIVE RECOMMENDATIONS

SECTION 7

Form 24: ALTERNATIVE RECOMMENDATIONS FOR CONCLUSION

Complete one copy of this form for each study conclusion that you described on Form 20. For each conclusion develop a minimum of two alternative recommendations, with accompanying justification statements. Rank the recommendations according to priority, with the most desirable listed first. Use as many extra pages as you need. You will submit these recommendations to others in the group decision-making process for management systems improvement.

RECOMMENDATIONS	JUSTIFICATIONS		
1.			
2.			
3.			

GENERAL SUPPLIES SYSTEM WORKBOOK



The MEDEX Primary Health Care Series

GENERAL SUPPLIES SYSTEM WORKBOOK

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Health Manpower Development Staff
John A. Burns School of Medicine
University of Hawaii, Honolulu, Hawaii, U.S.A.

Prepared for _____

Prepared by _____

Date completed _____

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Form 2: LIST OF DOCUMENTS REVIEWED	—	Form 14: SUMMARY OF FORM 5	—
Form 3: SCHEDULE FOR THE MONTH OF _____	—	Form 15: SUMMARY OF FORM 6	—
Form 4: WORK FLOW ANALYSIS	—	Form 16: SUMMARY OF FORM 7	—
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Form 11: VALIDATION OF FORM _____	—	Form 23: ALTERNATIVE PROBLEM-SOLVING APPROACHES	—
Form 12: OBJECTIVES OF THE SYSTEM	—	Form 24: ALTERNATIVE RECOMMENDATIONS FOR CONCLUSION _____	—

SECTION 1

INTRODUCTION

USING THE MANAGEMENT SYSTEM WORKBOOK

This is one of eight workbooks in a series designed to guide you in analyzing the management systems needed to support the delivery of primary health care services. The eight management support systems are:

- Drugs and Medical Supplies
- General Supplies
- Facilities and Equipment Maintenance
- Transportation
- Communication
- Personnel
- Finance
- Health Information

This workbook will help you conduct a comprehensive study of the general supplies system leading to recommendations for improving the efficiency and effectiveness of the system. The general supplies system is used to procure, store, distribute, and control the use of administrative, office, and other supplies and equipment.

The management system workbook consists mainly of forms. The forms will help you collect information in a standardized way so that it can be systematically reviewed and analyzed. Instructions for using the workbook are in the **Management Analysis Training Module**. The module includes exercises to prepare you to use the workbook forms to conduct an analysis of a management support system. Since the management procedures vary for each country's health care system, the workbooks fit no one situation perfectly.

Before you begin using a workbook you must adapt it to satisfy the special conditions in your country or region. You may need to:

- Translate the workbook into the local language
- Change the terminology to reflect local usage
- Limit or expand the scope of the analysis
- Omit certain forms or add new ones
- Revise individual forms
- Combine one or more workbooks

You will summarize the results of your analysis in a report that outlines alternative recommendations for improving the system you have studied. This report will become a reference document in the larger process for management development in your country. This process includes workshops that bring together policy level officials and field personnel who are involved in the operation of the system. These persons review the study report and recommend actions to be taken based on the study recommendations. This effort for strengthening the management support for primary health care services parallels other efforts to upgrade the management skills of primary health care workers in the system. In this way, the workers are provided with the skills they need to make the system function effectively and efficiently, and the system is strengthened to respond to the improved capabilities of the workers.

DESCRIPTION OF STUDY METHODS

Information will be gathered by the following methods:

The information gathered will be validated by the following methods:

Findings and conclusions will be formulated by the following methods:

Alternative recommendations will be formulated by the following methods:

SECTION 2

**INFORMATION SOURCES AND
SCHEDULING OF WORK ACTIVITIES**

Form I: LIST OF PERSONS INTERVIEWED

Use this form to plan your interview schedule and to keep a record of all the interviews that you conduct. Record the date of the interview and the name, title, address, and telephone number of each person interviewed or to be interviewed. This information will be included as an appendix to your written study report.

DATE	NAME	TITLE	ADDRESS	TELEPHONE

Form 2: LIST OF DOCUMENTS REVIEWED

Record the title, author, publisher, and date of publication for every major written document that you review for your study. Also include the date of the review and the source of the document. The information on this form will be included as an appendix to your written study report and will serve as your reference bibliography.

TITLE	AUTHOR	PUBLISHER/ DATE OF PUBLICATION	DATE REVIEWED	SOURCE OR LOCATION

Form 3: SCHEDULE FOR THE MONTH OF

Use this form to schedule and plan your work activities. Complete a new form for each month.

INFORMATION GATHERING

SECTION 3

Form 4: WORK FLOW ANALYSIS

This is a general use form for recording and analyzing the flow of work activities. Keep extra copies of this form available to supplement the interview and survey forms that follow.

Activity _____	Begins _____	Ends _____
Location _____	Date _____	
PRESENT METHOD		
Step Number	Action	Step Number
PROPOSED METHOD		
Step Number	Action	Step Number

Form 5: INVENTORY OF GENERAL SUPPLIES

Use this form to inventory all general supplies at selected facilities. List items by commonly used names, followed by trade name, package size, unit of issue, and code number, as appropriate. If an item is out of stock, indicate whether or not it is on order. Check the quantity of each item against the facility's inventory record. Note any discrepancies. Also note procedures for dealing with insufficient or excess stock and with fees charged for supplies.

Facility inspected _____	Location _____				
Person interviewed _____	Title _____				
Community _____	Region _____				
Health post _____	Central Ministry of Health _____				
Population served _____	Number of service contacts per month _____				
ITEM	UNIT COST	QUANTITY	SOURCE	PROBLEMS	
				SUGGESTIONS FOR IMPROVEMENT	

Form 6: PROCEDURES FOR REQUISITIONING, RECEIVING, AND STORING GENERAL SUPPLIES

Use this form to describe procedures for requisitioning, receiving, and storing general supplies. Attach copies of existing forms used in ordering, receiving, storing, and dispensing supplies. Use Form 4: Work Flow Analysis, to supplement information recorded, as appropriate.

Person interviewed _____	Title _____	Location _____	Date _____
<input type="checkbox"/> Community	<input type="checkbox"/> Health center	<input type="checkbox"/> Region	<input type="checkbox"/> Other _____
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health	
<input type="checkbox"/> Population served		<input type="checkbox"/> Number of service contacts per month _____	
SUPPLY PROCEDURES		ISSUES AND PROBLEMS	
Inventory control:			
		SUGGESTIONS FOR IMPROVEMENT	
		Ordering and requisitioning:	

STOCK CONTROL PROCEDURES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Inspection against shipping documents for quantity and damage:		
	Security against leakage or shrinkage:	
		Security against spoilage:

STOCK CONTROL PROCEDURES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Issuing of supplies inside and outside the facility:		
Adequacy of storage facilities and practices:		
Other:		

Form 7: LOCAL PURCHASING PRACTICES

Use this form to describe procedures for purchasing general supplies locally. Attach copies of forms and procedures for local purchases.

Person interviewed _____	Title _____	Location _____	Date _____
Community _____	Health center _____	Region _____	Other _____
Health post _____	District _____	Central Ministry of Health _____	
Population served _____		Number of service contacts per month _____	
		SUGGESTIONS FOR IMPROVEMENT	
ITEM	UNIT COST	SOURCE OF FUNDS AND METHOD OF PAYMENT	PROBLEMS

ITEM	UNIT COST	SOURCE OF FUNDS AND METHOD OF PAYMENT	PROBLEMS	SUGGESTIONS FOR IMPROVEMENT

Form 8: RESOURCES OF THE GENERAL SUPPLIES SYSTEM

Use this form to obtain and assess information about the availability and quality of resources to support a general supplies system at the health center level and above.

Person interviewed _____	Title _____	Location _____	Date _____
Population served _____	<input type="checkbox"/> Health center	<input type="checkbox"/> Region	
	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health	<input type="checkbox"/> Other _____
			<input type="checkbox"/> Number of service contacts per month _____
RESOURCES		SUGGESTIONS FOR IMPROVEMENTS	
Supply specialist personnel:			
Supply clerical personnel:			
Warehouse and storage facilities:			

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Transportation and distribution capabilities:		
Quality control and audit capabilities:		
Funds for general supplies:		

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Funds for general supplies management:	Training in general supplies management:	Other:

Form 9: PROCEDURES FOR ORDERING AND DISTRIBUTING GENERAL SUPPLIES

Use this form to trace the steps from the source of supplies to final distribution, with emphasis on procedures followed at each step. Study three randomly selected supply items, such as fuel, cleaning supplies, and commonly used office supplies, for the most recent complete fiscal year. Select items that are reasonably high in volume, used universally, and of value when used or sold outside the primary health care system. Include opening as well as closing stock levels.

Person interviewed _____	Title _____	Location _____	Date _____	Item studied _____
Community _____	Health center _____	Region _____		
Health post _____	District _____	Central Ministry of Health _____		
Population served _____		Number of service contacts per month _____		

STEP	PROCEDURE	DATE	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
1.	Opening stock level:			
2.	Order:			
3.	Delivery from central stores:			
4.	Local purchase:			

STEP	PROCEDURE	DATE	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
5.	Inspection against shipping document for quantity and damage;			
6.	Receipt of records:			
7.	Spoilage control:			
8.	Redistribution to other locations:			

STEP	PROCEDURE	DATE	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
9.	Closing stock level:			
10.	Return of supplies to ordering source:			
11.	Audit:			
12.	Other:			

Form 10: POLICIES AND ORGANIZATION OF THE GENERAL SUPPLIES SYSTEM

Use this form to describe the policies and organization of the general supplies system. Attach copies of policy directives, procedures, and organizational charts.

Person interviewed _____ Population served _____	Title _____ Health center _____ District _____	Location _____ Region _____ Central Ministry of Health _____ Number of service contacts per month _____	Date _____ Other _____
POLICIES Use of standardized supply lists:		ISSUES AND PROBLEMS SUGGESTIONS FOR IMPROVEMENT	
 Inventory control:		 Requirements for accountability:	

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Prediction of future needs:		
In-country manufacture versus importation:		
Use of donated supplies:		

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Authorized alternative sources of supplies:		
	Training of health care providers in supply utilization:	
		Other:

ORGANIZATION	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Supervisory chain of command:		
Delegation of authority and accountability:		
Centralization versus decentralization:		

ORGANIZATION	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Relationships with other organizations:		
User participation in supply management planning and decision-making:		
Other:		

Form II: VALIDATION OF FORM _____

Use this form to validate information that you obtain through personal interview. Review the information on the appropriate interview form with persons working at the next higher or next lower organizational levels of the system. Attach this form to the interview form reviewed.

HIGHER ORGANIZATION LEVEL	Person interviewed	Title	Location	Date
Comments:				
LOWER ORGANIZATION LEVEL	Person interviewed	Title	Location	Date
Comments:				

SECTION 4

OBJECTIVES AND FUNCTIONS OF THE GENERAL SUPPLIES SYSTEM

Form 12: OBJECTIVES OF THE SYSTEM

Use this form to record the present and proposed objectives of the general supplies system. Using the information you have gathered, describe what the system is now doing and what it should do in the future to adequately support the delivery of primary health care services.

Present objectives:

Proposed objectives:

Form 13: FUNCTIONS OF THE SYSTEM

Use this form as an organizational chart to help define the scope of the general supplies system. In the first column, record all of the functions of the system that you have identified. In the succeeding columns, indicate which aspect of each function is performed by the various organizational levels of the system. Use the following symbols to note the type of responsibility assumed for each function:

- P -- Prepares or reviews an action
- R -- Recommends an action
- A -- Approves an action
- E -- Executes an action
- M -- Monitors an action

FUNCTION	COMMUNITY LEVEL	HEALTH POST LEVEL	HEALTH CENTER LEVEL	DISTRICT LEVEL	REGIONAL LEVEL	CENTRAL MINISTRY OF HEALTH LEVEL	OTHER CENTRAL LEVEL

SUMMARY OF FINDINGS AND CONCLUSIONS

SECTION 5

Using Forms 14 to 19

Use Forms 14 to 19 to summarize the information that you have recorded on Forms 5 to 10. Notice that Forms 14 to 19 are similar in format to Forms 5 to 10. This will ease your work in summarizing the information. Use as many extra pages as you need.

Prepare a summary form for each organizational level of the primary health care system. For example, if you gathered information on Form 5 from each of the following organizational levels, you would then prepare six different versions of the same summary form, one for each organizational level:

- Community
- Health post
- Health center
- District
- Central ministry of health
- Other central agency

Form 14: SUMMARY OF FORM 5—INVENTORY OF GENERAL SUPPLIES

<input type="checkbox"/> Community	<input type="checkbox"/> Health center	<input type="checkbox"/> Region	<input type="checkbox"/> Other _____
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health	
ITEM	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT	

**Form 15: SUMMARY OF FORM 6—PROCEDURES FOR REQUISITIONING, RECEIVING,
AND STORING GENERAL SUPPLIES**

<input type="checkbox"/> Community	<input type="checkbox"/> Health center	<input type="checkbox"/> Region	<input type="checkbox"/> Other
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health	
SUPPLY PROCEDURES		ISSUES AND PROBLEMS	
Inventory control:			
		SUGGESTIONS FOR IMPROVEMENT	
Ordering and requisitioning:			

STOCK CONTROL PROCEDURES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Inspection against shipping documents for quantity and damage:		
	Security against leakage or shrinkage:	
	Security against spoilage:	

STOCK CONTROL PROCEDURES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Issuing of supplies inside and outside the facility:		
	Adequacy of storage facilities and practices:	
		Other:

Form 16: SUMMARY OF FORM 7—LOCAL PURCHASING PRACTICES

<input type="checkbox"/> Community	<input type="checkbox"/> Health center	<input type="checkbox"/> Region
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health
<input type="checkbox"/> Other		
ITEM	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT

Form 17: SUMMARY OF FORM 8—RESOURCES OF THE GENERAL SUPPLIES SYSTEM

<input type="checkbox"/> Health center	<input type="checkbox"/> Region	<input type="checkbox"/> Other
<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health	
SUGGESTIONS FOR IMPROVEMENT		
RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Supply specialist personnel:		
Supply clerical personnel:		
Warehouse and storage facilities:		

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Transportation and distribution capabilities:		
Quality control and audit capabilities:		
Funds for general supplies:		

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Funds for general supplies management:		
Training in general supplies management:		
Other:		

**Form 18: SUMMARY OF FORM 9—PROCEDURES FOR ORDERING
AND DISTRIBUTING GENERAL SUPPLIES**

Community		Health center		Region	
<input type="checkbox"/> Health post		<input type="checkbox"/> District		<input type="checkbox"/> Other	
				<input type="checkbox"/> Central Ministry of Health	
SUGGESTIONS FOR IMPROVEMENT					
STEP	PROCEDURE	DATE	ISSUES AND PROBLEMS		SUGGESTIONS FOR IMPROVEMENT
1.	Opening stock level:				
2.	Order:				
3.	Delivery from central stores:				
4.	Local purchase:				

STEP	PROCEDURE	DATE	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
5.	Inspection against shipping document for quantity and damage:			
6.	Receipt of records:			
7.	Spoilage control:			
8.	Redistribution to other locations:			

STEP	PROCEDURE	DATE	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
9.	Closing stock level:			
10.	Return of supplies to ordering source:			
11.	Audit:			
12.	Other:			

**Form 19: SUMMARY OF FORM 10—POLICIES AND ORGANIZATION
OF THE GENERAL SUPPLIES SYSTEM**

		Health center	Region	Other
		District	Central Ministry of Health	
POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT		
Use of standardized supply lists:				
Inventory control:				
Requirements for accountability:				
		DHC - 100 02105		

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Prediction of future needs:	In-country manufacture versus importation:	
		Use of donated supplies:

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Authorized alternative sources of supplies:		
	Training of health care providers in supply utilization:	
	Other:	

ORGANIZATION	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Supervisory chain of command:		
Delegation of authority and accountability:		
Centralization versus decentralization:		

ORGANIZATION	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Relationships with other organizations:	User participation in supply management planning and decision-making;	Other:

Form 20: SUMMARY OF FINDINGS AND CONCLUSIONS

Use this form to describe the issues and problems that you have identified in your study. Summarize each issue or problem in the "Findings" column. Assign each conclusion a reference number to link it to the alternative recommendations to be described in Form 24.

Community <input type="checkbox"/> Health post <input type="checkbox"/>	Health center <input type="checkbox"/> District <input type="checkbox"/>	Region <input type="checkbox"/> Central Ministry of Health <input type="checkbox"/>	Other <input type="checkbox"/>
FINDINGS			
CONCLUSIONS			
REFERENCE NUMBER			

FINDINGS	CONCLUSIONS	REFERENCE NUMBER

PROBLEM-SOLVING

SECTION 6

Form 21: STATEMENT OF PROBLEM AND ROOT CAUSES

This is the first of three forms used in the step-by-step problem-solving approach to analyzing and developing solutions to management problems. Use this form to state each problem that you identify and its root causes. The completed form will be the basis for further analysis.

STATEMENT OF THE PROBLEM		ROOT CAUSE(S) OF THE PROBLEM
What is the problem?		
When and how often does it occur?		
How does the problem affect health management?		
How severe is the impact?		
Where does the problem occur?		
Who is affected by the problem?		
Who is responsible for the work activity where the problem occurs?		
		1.
		2.
		3.

Form 22: ANALYSIS OF FORCES AFFECTING CHANGE

This is the second form in the problem-solving approach to solving management problems. Use this form to identify factors that either constrain actions toward reaching a solution or help in reaching a solution. The completed form will be the basis for further analysis.

CONSTRAINING FORCES	HELPING FORCES

Form 23: ALTERNATIVE PROBLEM-SOLVING APPROACHES

This is the third of three forms in the problem-solving approach to solving management problems. Use this form to identify and examine alternative approaches to solving the problems that you have identified. This completed form becomes a reference for developing your final recommendations.

APPROACH	ADVANTAGES	DISADVANTAGES



SECTION 7

ALTERNATIVE RECOMMENDATIONS

Form 24: ALTERNATIVE RECOMMENDATIONS FOR CONCLUSION

Complete one copy of this form for each study conclusion that you described on Form 20. For each conclusion develop a minimum of two alternative recommendations, with accompanying justification statements. Rank the recommendations according to priority, with the most desirable listed first. Use as many extra pages as you need. You will submit these recommendations to others in the group decision-making process for management systems improvement.

RECOMMENDATIONS	JUSTIFICATIONS
1.	
2.	
3.	

**FACILITIES AND EQUIPMENT MAINTENANCE
SYSTEM WORKBOOK**



The MEDEX Primary Health Care Series

FACILITIES AND EQUIPMENT MAINTENANCE SYSTEM WORKBOOK

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Health Manpower Development Staff
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University of Hawaii, Honolulu, Hawaii, U.S.A.

Prepared for _____

Prepared by _____

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Form 11: OBJECTIVES OF THE SYSTEM	—	Form 22: ALTERNATIVE RECOMMENDATIONS FOR CONCLUSION _____	—

INTRODUCTION

SECTION 1

USING THE MANAGEMENT SYSTEM WORKBOOK

This is one of eight workbooks in a series designed to guide you in analyzing the management systems needed to support the delivery of primary health care services. The eight management support systems are:

- | | |
|--------------------------------------|--------------------|
| Drugs and Medical Supplies | Communication |
| General Supplies | Personnel |
| Facilities and Equipment Maintenance | Finance |
| Transportation | Health Information |

This workbook will help you conduct a comprehensive study of the facilities and equipment maintenance system leading to recommendations for improving the efficiency and effectiveness of the system. The facilities and equipment maintenance system is used to protect facilities and equipment from deterioration and to help prolong their useful life through preventive maintenance and repair.

The management system workbook consists mainly of forms. The forms will help you collect information in a standardized way so that it can be systematically reviewed and analyzed. Instructions for using the workbook are in the Management Analysis Training Module. The module includes exercises to prepare you to use the workbook forms to conduct an analysis of a management support system. Since the management procedures vary for each country's health care system, the workbooks fit no one situation perfectly.

Before you begin using a workbook you must adapt it to satisfy the special conditions in your country or region. You may need to:

- Translate the workbook into the local language
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- Limit or expand the scope of the analysis
- Omit certain forms or add new ones
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You will summarize the results of your analysis in a report that outlines alternative recommendations for improving the system you have studied. This report will become a reference document in the larger process for management development in your country. This process includes workshops that bring together policy level officials and field personnel who are involved in the operation of the system. These persons review the study report and recommend actions to be taken based on the study recommendations. This effort for strengthening the management support for primary health care services parallels other efforts to upgrade the management skills of primary health care workers in the system. In this way, the workers are provided with the skills they need to make the system function effectively and efficiently, and the system is strengthened to respond to the improved capabilities of the workers.

DESCRIPTION OF STUDY METHODS

Information will be gathered by the following methods:

The information gathered will be validated by the following methods:

Findings and conclusions will be formulated by the following methods:

Alternative recommendations will be formulated by the following methods:

SECTION 2

**INFORMATION SOURCES AND
SCHEDULING OF WORK ACTIVITIES**

Form 1: LIST OF PERSONS INTERVIEWED

Use this form to plan your interview schedule and to keep a record of all the interviews that you conduct. Record the date of the interview and the name, title, address, and telephone number of each person interviewed or to be interviewed. This information will be included as an appendix to your written study report.

DATE	NAME	TITLE	ADDRESS	TELEPHONE

Form 2: LIST OF DOCUMENTS REVIEWED

Record the title, author, publisher, and date of publication for every major written document that you review for your study. Also include the date of the review and the source of the document. The information on this form will be included as an appendix to your written study report and will serve as your reference bibliography.

TITLE	AUTHOR	PUBLISHER/ DATE OF PUBLICATION	DATE REVIEWED	SOURCE OR LOCATION

Form 3: SCHEDULE FOR THE MONTH OF

Use this form to schedule and plan your work activities. Complete a new form for each month.

INFORMATION GATHERING

SECTION 3

Form 4: WORK FLOW ANALYSIS

This is a general use form for recording and analyzing the flow of work activities. Keep extra copies of this form available to supplement the interview and survey forms that follow.

Activity _____	Begins _____	Ends _____
Location _____	Date _____	
PRESENT METHOD		
Step Number	Action	Step Number
PROPOSED METHOD		
Step Number	Action	

Form 5: PRIMARY HEALTH CARE FACILITIES AND EQUIPMENT

This form will help you conduct an inventory of primary health care facilities and equipment. The person in charge of the facility should accompany you as you inspect and inventory the facilities and equipment. Survey each building room-by-room. Assess the condition of each item using the following scale:

- 1 -- Excellent
- 2 -- Good
- 3 -- Fair
- 4 -- Poor
- 5 -- Needs repair before further use
- 6 -- Needs to be replaced

Whenever an item needs better maintenance or repair, obtain an estimate of how long it has been in its present condition.

Facility inspected _____ Person interviewed _____	Location _____ Title _____	Location _____ Date _____
<input type="checkbox"/> Community <input type="checkbox"/> Health post <input type="checkbox"/> Population served _____	<input type="checkbox"/> Health center <input type="checkbox"/> District <input type="checkbox"/> Region <input type="checkbox"/> Central Ministry of Health <input type="checkbox"/> Other _____ <input type="checkbox"/> Number of service contacts per month _____	
1. Who owns your facility?		
2. Who originally provided your facility?		
3. Who is responsible for facility maintenance and repair?		

4. What are the main problems with the facility?

5. Who provided your equipment?

6. Who is responsible for equipment maintenance and repair?

7. Do you have any problems with equipment maintenance and repair?

8. Do you have any additional comments?

Inventory of Grounds, Facilities, and Equipment

ITEM		ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Description	Condition		

Form 6: MAINTENANCE AND REPAIR PROCEDURES

Use this form to describe procedures for obtaining and providing preventive maintenance and repairs. Interview the person or persons responsible for initiating preventive maintenance efforts. Attach to this form copies of printed procedures for preventive maintenance and repairs. Use Form 4: Work Flow Analysis, to describe the flow of preventive maintenance and repair request documents and other paper work, as appropriate.

Person interviewed _____	Title _____	Location _____	Date _____
<input type="checkbox"/> Community	<input type="checkbox"/> Health center	<input type="checkbox"/> Region	
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health	
Population served _____		<input type="checkbox"/> Number of service contacts per month _____	
Facility			
MAINTENANCE AND REPAIR PROCEDURES		ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT

Equipment	MAINTENANCE AND REPAIR PROCEDURES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT

Maintenance and repair services in order of frequency requested

RANK	TYPE OF SERVICE	TIMES PER MONTH		TYPE OF SERVICE	TIMES PER MONTH	
		REQUESTED	DONE		RANK	REQUESTED
1.				11.		
2.				12.		
3.				13.		
4.				14.		
5.				15.		
6.				16.		
7.				17.		
8.				18.		
9.				19.		
10.				20.		

Form 7: MAINTENANCE AND REPAIR RESOURCES

Use this form to obtain and assess information about the availability and quality of resources to support a primary health care preventive maintenance and repair system.

Person interviewed _____	Title _____	Location _____	Date _____
— Community	— Health center	— Region	
— Health post	— District	— Central Ministry of Health	
— Population served		— Number of service contacts per month _____	
RESOURCES		SUGGESTIONS FOR IMPROVEMENT	
Maintenance and repair personnel:			
Skills of maintenance and repair personnel:			

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Adequacy of working conditions for maintenance and repair personnel:		
Tools of maintenance and repair personnel:		
Transportation of maintenance and repair personnel:		

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Morale of maintenance and repair personnel:		
Buildings and facilities for repair services:		
Equipment for repair services:		

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Availability of spare parts:		
Maintenance and repair supplies:		
Funds for maintenance and repairs:		

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Other:		

Form 8: MAINTENANCE AND REPAIR EQUIPMENT

Use this form to describe existing equipment used for maintenance and repair purposes at various levels of the primary health care system. Assess the condition of each item using the following scale:

- 1 -- Excellent
- 2 -- Good
- 3 -- Fair
- 4 -- Poor
- 5 -- Needs repair before further use
- 6 -- Needs to be replaced

Person interviewed _____	Title _____	Location _____	Date _____
<input type="checkbox"/> Community	<input type="checkbox"/> Health center	<input type="checkbox"/> Region	
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health	
Population served _____		<input type="checkbox"/> Number of service contacts per month _____	

ITEM		ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Description	Condition		

ITEM	ISSUES AND PROBLEMS		SUGGESTIONS FOR IMPROVEMENT
Description	Condition		

Form 9: POLICIES AND ORGANIZATION OF THE FACILITIES AND EQUIPMENT MAINTENANCE SYSTEM

Use this form to describe the policies and organization of the facilities and equipment maintenance system. Attach copies of policy directives, procedures, and organizational charts.

Person interviewed _____ Population served _____	Title _____ Health center _____ District _____ Region _____ Central Ministry of Health _____ Other _____	Location _____ Number of service contacts per month _____	Date _____
POLICIES Responsibility for ministry of health preventive maintenance program for primary health care facilities:		ISSUES AND PROBLEMS SUGGESTIONS FOR IMPROVEMENT	
Responsibility for ministry of health preventive maintenance program for primary health care equipment:		Responsibility for repair of inoperable equipment:	

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Responsibility for day-to-day maintenance of primary health care facilities:		
	Responsibility for day-to-day maintenance of primary health care equipment:	
	Responsibility for preventive maintenance logs:	

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Quality control inspections and audits:		
Delegation of accountability and authority:		
Centralization versus decentralization:		

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Relationships with other ministries or agencies:		
	Relationships with private sector:	
	Other:	

Form 10: VALIDATION OF FORM

Use this form to validate information that you obtain through personal interview. Review the information on the appropriate interview form with persons working at the next higher or next lower organizational levels of the system. Attach this form to the interview form reviewed.

HIGHER ORGANIZATION LEVEL		Person interviewed			
		Title	Location	Date	
Comments:					
LOWER ORGANIZATION LEVEL		Person interviewed			
		Title	Location	Date	
Comments:					

SECTION 4

**OBJECTIVES AND FUNCTIONS OF THE
FACILITIES AND EQUIPMENT MAINTENANCE
SYSTEM**

Form II: OBJECTIVES OF THE SYSTEM

Use this form to record the present and proposed objectives of the facilities and equipment maintenance system. Using the information you have gathered, describe what the system is now doing and what it should do in the future to adequately support the delivery of primary health care services.

Present objectives:

Proposed objectives:

Form 12: FUNCTIONS OF THE SYSTEM

Use this form as an organizational responsibility chart to help define the scope of the facilities and equipment maintenance system. In the first column, record all of the functions of the system that you have identified. In the succeeding columns, indicate which aspect of each function is performed by the various organizational levels of the system. Use the following symbols to note the type of responsibility for each function:

- P -- Prepares or reviews an action
- R -- Recommends an action
- A -- Approves an action
- E -- Executes an action
- M -- Monitors an action

FUNCTIONS	COMMUNITY LEVEL	HEALTH POST LEVEL	HEALTH CENTER LEVEL	DISTRICT LEVEL	REGIONAL LEVEL	CENTRAL MINISTRY OF HEALTH LEVEL	OTHER CENTRAL LEVEL



SECTION 5

SUMMARY OF FINDINGS AND CONCLUSIONS

Using Forms 13 to 17

Use Forms 13 to 17 to summarize the information that you have recorded on Forms 5 to 9. Notice that Forms 13 to 17 are similar in format to Forms 5 to 9. This will ease your work in summarizing the information. Use as many extra pages as you need.

Prepare a summary form for each organizational level of the primary health care system. For example, if you gathered information on Form 5 from each of the following organizational levels, you would then prepare six different versions of the same summary form, one for each organizational level:

- Community
- Health post
- Health center
- District
- Central ministry of health
- Other central agency

Form 13: SUMMARY OF FORM 5—PRIMARY HEALTH CARE FACILITIES AND EQUIPMENT

<input type="checkbox"/> Community	<input type="checkbox"/> Health center	<input type="checkbox"/> Region
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health
<input type="checkbox"/> Other _____		

1. Who owns your facility?

2. Who originally provided your facility?

3. Who is responsible for facility maintenance and repair?

4. What are the main problems with the facility?

5. Who provided your equipment?

6. Who is responsible for equipment maintenance and repair?

7. Do you have any problems with equipment maintenance and repair?

8. Do you have any additional comments?

Inventory of Grounds, Facilities, and Equipment

ITEM		ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Description	Condition		

Form 14: SUMMARY OF FORM 6—MAINTENANCE AND REPAIR PROCEDURES

<input type="checkbox"/> Community	<input type="checkbox"/> Health center	<input type="checkbox"/> Region
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health
<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____
Facility		
MAINTENANCE AND REPAIR PROCEDURES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT

Equipment	Maintenance and Repair Procedures	Issues and Problems	Suggestions for Improvement

Maintenance and repair services in order of frequency requested

RANK	TYPE OF SERVICE	TIMES PER MONTH			TIMES PER MONTH	
		REQUESTED	DONE	RANK	REQUESTED	DONE
1.				11.		
2.				12.		
3.				13.		
4.				14.		
5.				15.		
6.				16.		
7.				17.		
8.				18.		
9.				19.		
10.				20.		

Form 15: SUMMARY OF FORM 7—MAINTENANCE AND REPAIR RESOURCES

<input type="checkbox"/> Community	<input type="checkbox"/> Health post	<input type="checkbox"/> Health center	<input type="checkbox"/> Region
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health	<input type="checkbox"/> Other _____
RESOURCES		ISSUES AND PROBLEMS	
Maintenance and repair personnel:			
		SUGGESTIONS FOR IMPROVEMENT	
Skills of maintenance and repair personnel:			

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Adequacy of working conditions for maintenance and repair personnel:		
Tools of maintenance and repair personnel:		
Transportation of maintenance and repair personnel:		

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Morale of maintenance and repair personnel:		
Buildings and facilities for repair services:		
Equipment for repair services:		

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Availability of spare parts:		
Maintenance and repair supplies:		
Funds for maintenance and repairs:		

RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT	
Other:			

III 16. SUMMARY OF FORM 8—MAINTENANCE AND REPAIR EQUIPMENT

<input type="checkbox"/> Community	<input type="checkbox"/> Health center	<input type="checkbox"/> Region
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health
<input type="checkbox"/>	<input type="checkbox"/> Other	<input type="checkbox"/>
SUGGESTIONS FOR IMPROVEMENT		
ITEM		ISSUES AND PROBLEMS
Description	Condition	

ITEM	ISSUES AND PROBLEMS		SUGGESTIONS FOR IMPROVEMENT
	Description	Condition	

**Form 17: SUMMARY OF FORM 9—POLICIES AND ORGANIZATION OF
THE FACILITIES AND EQUIPMENT MAINTENANCE SYSTEM**

<input type="checkbox"/> Health center <input type="checkbox"/> District	<input type="checkbox"/> Region <input type="checkbox"/> Central Ministry of Health <input type="checkbox"/> Other _____	
POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Responsibility for ministry of health preventive maintenance program for primary health care facilities:		
Responsibility for ministry of health preventive maintenance program for primary health care equipment:		
Responsibility for repair of inoperable equipment:		

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Responsibility for day-to-day maintenance of primary health care facilities:		
	Responsibility for day-to-day maintenance of primary health care equipment:	
		Responsibility for preventive maintenance logs:

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Quality control inspections and audits:		
Delegation of accountability and authority:		
Centralization versus decentralization:		

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Relationships with other ministries or agencies:		
	Relationships with private sector:	
		Other:

Form 18: SUMMARY OF FINDINGS AND CONCLUSIONS

Use this form to describe the issues and problems that you have identified in your study. Summarize each issue or problem in the "Findings" column. Assign each conclusion a reference number to link it to the alternative recommendations to be described in Form 22.

Community <input type="checkbox"/>	Health post <input type="checkbox"/>	Health center <input type="checkbox"/>	District <input type="checkbox"/>	Region <input type="checkbox"/>	Central Ministry of Health <input type="checkbox"/>	Other <input type="checkbox"/>
FINDINGS						
CONCLUSIONS						
REFERENCE NUMBER						

REFERENCE NUMBER	CONCLUSIONS
FINDINGS	

SECTION 6

PROBLEM-SOLVING

Form 19: STATEMENT OF PROBLEM AND ROOT CAUSES

This is the first of three forms used in the step-by-step problem-solving approach to analyzing and developing solutions to management problems. Use this form to state each problem that you identify and its root causes. The completed form will be the basis for further analysis.

STATEMENT OF THE PROBLEM		ROOT CAUSE(S) OF THE PROBLEM
What is the problem?		1.
When and how often does it occur?		2.
How does the problem affect health management?		3.
How severe is the impact?		
Where does the problem occur?		
Who is affected by the problem?		
Who is responsible for the work activity where the problem occurs?		

Form 20: ANALYSIS OF FORCES AFFECTING CHANGE

This is the second form in the problem-solving approach to solving management problems. Use this form to identify factors that either constrain actions toward reaching a solution or help in reaching a solution. The completed form will be the basis for further analysis.

CONSTRAINING FORCES	HELPING FORCES
---------------------	----------------

Form 21: ALTERNATIVE PROBLEM-SOLVING APPROACHES

This is the third of three forms in the problem-solving approach to solving management problems. Use this form to identify and examine alternative approaches to solving the problems that you have identified. This completed form becomes a reference for developing your final recommendations.

APPROACH	ADVANTAGES	DISADVANTAGES

SECTION 7

ALTERNATIVE RECOMMENDATIONS

Form 22: ALTERNATIVE RECOMMENDATIONS FOR CONCLUSION

Complete one copy of this form for each study conclusion that you described on Form 18. For each conclusion develop a minimum of two alternative recommendations, with accompanying justification statements. Rank the recommendations according to priority, with the most desirable listed first. Use as many extra pages as you need. You will submit these recommendations to others in the group decision-making process for management systems improvement.

RECOMMENDATIONS	JUSTIFICATIONS
1.	
2.	
3.	

TRANSPORTATION SYSTEM WORKBOOK



The MEDEX Primary Health Care Series

TRANSPORTATION SYSTEM WORKBOOK

©1983

Health Manpower Development Staff

John A. Burns School of Medicine

University of Hawaii, Honolulu, Hawaii, U.S.A.

Prepared for _____

Prepared by _____

Date completed _____

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OF _____
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TRANSPORTATION
Form 6: INVENTORY OF PUBLIC
TRANSPORTATION
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FACILITIES
Form 8: POLICIES AND ORGANIZATION OF THE
TRANSPORTATION SYSTEM
Form 9: VALIDATION OF FORM ____
Form 10: OBJECTIVES OF THE SYSTEM

Form 11: FUNCTIONS OF THE SYSTEM

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Form 13: SUMMARY OF FORM 6

Form 14: SUMMARY OF FORM 7

Form 15: SUMMARY OF FORM 8

Form 16: SUMMARY OF FINDINGS AND
CONCLUSIONS

Form 17: STATEMENT OF PROBLEM AND ROOT
CAUSES

Form 18: ANALYSIS OF FORCES AFFECTING
CHANGE

Form 19: ALTERNATIVE PROBLEM-SOLVING
APPROACHES

Form 20: ALTERNATIVE RECOMMENDATIONS FOR
CONCLUSION _____

INTRODUCTION

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- Drugs and Medical Supplies
- Communication
- General Supplies
- Personnel
- Facilities and Equipment Maintenance
- Finance
- Transportation
- Health Information

This workbook will help you conduct a comprehensive study of the transportation system leading to recommendations for improving the efficiency and effectiveness of the system. The transportation system is used to provide, protect, and manage transportation resources needed to move health workers, patients, and supplies. The management system workbook consists mainly of forms. The forms will help you collect information in a standardized way so that it can be systematically reviewed and analyzed. Instructions for using the workbook are in the *Management Analysis Training Module*. The module includes exercises to prepare you to use the workbook forms to conduct an analysis of a management support system. Since management procedures vary for each country's health care system, the workbooks fit no one situation perfectly. Before

you begin using a workbook you must adapt it to satisfy the special conditions in your country or region. You may need to:

- Translate the workbook into the local language
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- Limit or expand the scope of the analysis
- Omit certain forms or add new ones
- Revise individual forms
- Combine one or more workbooks

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Information will be gathered by the following methods:

The information gathered will be validated by the following methods:

Findings and conclusions will be formulated by the following methods:

Alternative recommendations will be formulated by the following methods:

SECTION 2

**INFORMATION SOURCES AND
SCHEDULING OF WORK ACTIVITIES**

Form 1: LIST OF PERSONS INTERVIEWED

Use this form to plan your interview schedule and to keep a record of all the interviews that you conduct. Record the date of the interview and the name, title, address, and telephone number of each person interviewed or to be interviewed. This information will be included as an appendix to your written study report.

DATE	NAME	TITLE	ADDRESS	TELEPHONE

Form 2: LIST OF DOCUMENTS REVIEWED

Record the title, author, publisher, and date of publication for every major written document that you review for your study. Also include the date of the review and the source of the document. The information on this form will be included as an appendix to your written study report and will serve as your reference bibliography.

TITLE	AUTHOR	PUBLISHER/ DATE OF PUBLICATION	DATE REVIEWED	SOURCE OR LOCATION

Form 3: SCHEDULE FOR THE MONTH OF

Use this form to schedule and plan your work activities. Complete a new form for each month.

INFORMATION GATHERING

SECTION 3

Form 4: WORK FLOW ANALYSIS

This is a general use form for recording and analyzing the flow of work activities. Keep extra copies of this form available to supplement the interview and survey forms that follow.

Activity _____	Begins _____	Ends _____	
Location _____	Date _____		
PRESENT METHOD			
Step Number	Action	Step Number	Action
PROPOSED METHOD			
Step Number	Action		

Form 5: INVENTORY OF PUBLIC TRANSPORTATION

Use this form to survey public transportation resources at the different levels of the primary health care system. First, interview the person in charge of the primary health care facility being surveyed. Later, verify this information by talking to other people in the community or area who use public transportation, such as teachers, merchants, and operators of transportation services. At the community level, include all available transportation resources. At the district level and above, include only those public transportation resources that are relevant to the delivery of primary health care services.

Person interviewed _____	Title _____	Location _____	Date _____
Community _____	Health center _____	Region _____	
Health post _____	District _____	Central Ministry of Health _____	
Population served _____	Number of service contacts per month _____		
TYPE OF AVAILABLE PUBLIC TRANSPORTATION		FREQUENCY OF USE	ISSUES AND PROBLEMS
			SUGGESTIONS FOR IMPROVEMENT

Form 6: INVENTORY OF PROGRAM VEHICLES

Use this form to survey program transportation resources at the different levels of the primary health care system. At the district level and above, interview primary health care administrators. At the community level, survey community health workers to determine their perceptions of the transportation system that serves them. Do not overlook vehicles such as bicycles that may be assigned to health posts. Also include vehicles that are controlled by other government departments but that are used to support primary health care services at the community level. Be specific when noting the type of vehicle. Indicate in the third column whether the vehicle is used primarily to transport patients, deliver supplies, or transport health workers. If one vehicle has multiple uses, indicate the relative importance of the various functions with a percentage estimate.

Person interviewed _____	Title _____	Location _____	Date _____
<p>Region _____ Other _____</p> <p>Central Ministry of Health _____</p> <p>Number of service contacts per month _____</p>			
Community _____	Health center _____		
Health post _____	District _____		
Population served _____			

TYPE OF VEHICLE	CONDITION	USE	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT

PREVENTIVE MAINTENANCE PRACTICES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
REPAIR SOURCES AND PRACTICES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT

VEHICLE REPLACEMENT PRACTICES				ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Type of Vehicle	Year of Purchase	Purchased By	To Be Replaced By		

Form 7: VEHICLE MAINTENANCE AND REPAIR FACILITIES

Use this form to survey maintenance and repair facilities that service primary health care vehicles. At the community level, these may include bicycle repair shops or even stables for animals. If facilities do not exist at the community level, determine the demand for maintenance and repair services.

Person interviewed _____	Title _____	Location _____	Date _____
Facility _____	Address _____		
TYPES OF VEHICLES SERVICED	SERVICES PROVIDED	ISSUES AND PROBLEMS	
		SUGGESTIONS FOR IMPROVEMENT	

MAINTENANCE AND REPAIR RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Maintenance and repair specialists:		
Tools:		
Working conditions:		

MAINTENANCE AND REPAIR RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Spare parts:		
	Funds for vehicle maintenance and repair:	
	Other:	

Form 8: POLICIES AND ORGANIZATION OF THE TRANSPORTATION SYSTEM

Use this form to document transportation policies related to the use, maintenance, and replacement of vehicles, and to describe the organization of the transportation system. Attach copies of policy directives, procedures, and organizational charts, as appropriate.

Person interviewed _____	Title _____	Location _____	Date _____
<input type="checkbox"/> Community	Health center	Region _____	
<input type="checkbox"/> Health post	District	Central Ministry of Health	
<input type="checkbox"/> Population served _____		Number of service contacts per month _____	
POLICIES		ISSUES AND PROBLEMS	
Persons authorized to drive vehicles:			
Driver selection and training:			
How, when, and where vehicles may be used:			

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Daily maintenance:		
	Periodic preventive maintenance:	
		Vehicle log book:

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Reporting of accidents and damage:		
Inoperable vehicles:		
Other:		

ORGANIZATION	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Supervisory chain of command:		
Delegation of responsibility and authority:		
Centralization versus decentralization:		

ORGANIZATION	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Relationships with other organizations:		
	User participation in planning and decision-making:	
	Other:	

Form 3: VALIDATION OF FORM

Use this form to validate information that you obtain through personal interview. Review the information on the appropriate interview form with persons working at the next higher or next lower organizational levels of the system. Attach this form to the interview form reviewed.

HIGHER ORGANIZATION LEVEL Person interviewed		Title	Location	Date
Comments:				

LOWER ORGANIZATION LEVEL Person interviewed		Title	Location	Date
Comments:				



SECTION 4

**OBJECTIVES AND FUNCTIONS OF THE
TRANSPORTATION SYSTEM**

Form 10: OBJECTIVES OF THE SYSTEM

Use this form to record the present and proposed objectives of the transportation system. Using the information you have gathered, describe what the system is now doing and what it should do in the future to adequately support the delivery of primary health care services.

Present objectives:

Proposed objectives:

Form II: FUNCTIONS OF THE SYSTEM

Use this form as an organizational responsibility chart to help define the scope of the transportation system. In the first column, record all of the functions of the system that you have identified. In the succeeding columns, indicate which aspect of each function is performed by the various organizational levels of the system. Use the following symbols to note the type of responsibility for each function:

- P -- Prepares or reviews an action
- R -- Recommends an action
- A -- Approves an action
- E -- Executes an action
- M -- Monitors an action

FUNCTIONS	COMMUNITY LEVEL	HEALTH POST LEVEL	HEALTH CENTER LEVEL	DISTRICT LEVEL	REGIONAL LEVEL	CENTRAL MINISTRY OF HEALTH LEVEL	OTHER CENTRAL LEVEL



SUMMARY OF FINDINGS AND CONCLUSIONS

SECTION 5

Using Forms 12 to 15

Use Forms 12 to 15 to summarize the information that you have recorded on Forms 5 to 8. Notice that Forms 12 to 15 are similar in format to Forms 5 to 8. This will ease your work in summarizing the information. Use as many extra pages as you need.

Prepare a summary form for each organizational level of the primary health care system. For example, if you gathered information on Form 5 from each of the following organizational levels, you would then prepare six different versions of the same summary form, one for each organizational level:

- Community
- Health post
- Health center
- District
- Central ministry of health
- Other central agency

Form 12: SUMMARY OF FORM 5—INVENTORY OF PUBLIC TRANSPORTATION

TYPE OF AVAILABLE PUBLIC TRANSPORTATION		FREQUENCY OF USE	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
<input type="checkbox"/> Community	<input type="checkbox"/> Health post	<input type="checkbox"/> Health center <input type="checkbox"/> District	<input type="checkbox"/> Region <input type="checkbox"/> Central Ministry of Health	<input type="checkbox"/> Other

Form 13: SUMMARY OF FORM 6—INVENTORY OF PROGRAM VEHICLES

<input type="checkbox"/> Community	<input type="checkbox"/> Health center	<input type="checkbox"/> Region
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Central Ministry of Health
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other _____

TYPE OF VEHICLE	CONDITION	USE	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT

PREVENTIVE MAINTENANCE PRACTICES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
REPAIR SOURCES AND PRACTICES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT

VEHICLE REPLACEMENT PRACTICES				ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Type of Vehicle	Year of Purchase	Purchased By	To Be Replaced By		

Form 14: SUMMARY OF FORM 7—VEHICLE MAINTENANCE AND REPAIR FACILITIES

Type of Facility	TYPE OF VEHICLES SERVICED	SERVICES PROVIDED	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT

MAINTENANCE AND REPAIR RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Maintenance and repair specialists:		
Tools:		
Working conditions:		

MAINTENANCE AND REPAIR RESOURCES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Spare parts:		
Funds for vehicle maintenance and repair:		
Other:		

**Form 15: SUMMARY OF FORM 8—POLICIES AND ORGANIZATION
OF THE TRANSPORTATION SYSTEM**

<input type="checkbox"/> Community	<input type="checkbox"/> Health center	<input type="checkbox"/> Region
<input type="checkbox"/> Health post	<input type="checkbox"/> District	<input type="checkbox"/> Other
<input type="checkbox"/>	<input type="checkbox"/> Central Ministry of Health	<input type="checkbox"/>
POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Persons authorized to drive vehicles:		
Driver selection and training:		
How, when, and where vehicles may be used:		

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Daily maintenance:		
Periodic preventive maintenance:		
Vehicle log book:		

POLICIES	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Reporting of accidents and damage:		
Inoperable vehicles:		
Other:		

ORGANIZATION	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Supervisory chain of command:		
Delegation of responsibility and authority:		
Centralization versus decentralization:		

ORGANIZATION	ISSUES AND PROBLEMS	SUGGESTIONS FOR IMPROVEMENT
Relationships with other organizations:	User participation in planning and decision-making:	Other:

Form 16: SUMMARY OF FINDINGS AND CONCLUSIONS

Use this form to describe the issues and problems that you have identified in your study. Summarize each issue or problem in the "Findings" column. Assign each conclusion a reference number to link it to the alternative recommendations to be described in Form 20.

Community <input type="checkbox"/> Health post <input type="checkbox"/>	Health center <input type="checkbox"/> District <input type="checkbox"/>	Region <input type="checkbox"/> Central Ministry of Health <input type="checkbox"/>	Other <input type="checkbox"/>
FINDINGS			
CONCLUSIONS			
REFERENCE NUMBER			

REFERENCE NUMBER	CONCLUSIONS
FINDINGS	



SECTION 6

PROBLEM-SOLVING

Form 17: STATEMENT OF PROBLEM AND ROOT CAUSES

This is the first of three forms used in the step-by-step problem-solving approach to analyzing and developing solutions to management problems. Use this form to state each problem that you identify and its root causes. The completed form will be the basis for further analysis.

STATEMENT OF THE PROBLEM		ROOT CAUSE(S) OF THE PROBLEM
What is the problem?		1.
When and how often does it occur?		2.
How does the problem affect health management?		3.
How severe is the impact?		
Where does the problem occur?		
Who is affected by the problem?		
Who is responsible for the work activity where the problem occurs?		

Form 18: ANALYSIS OF FORCES AFFECTING CHANGE

This is the second form in the problem-solving approach to solving management problems. Use this form to identify factors that either constrain actions toward reaching a solution or help in reaching a solution. The completed form will be the basis for further analysis.

CONSTRAINING FORCES	HELPING FORCES

Form 19: ALTERNATIVE PROBLEM-SOLVING APPROACHES

This is the third of three forms in the problem-solving approach to solving management problems. Use this form to identify and examine alternative approaches to solving the problems that you have identified. This completed form becomes a reference for developing your final recommendations.

APPROACH	ADVANTAGES	DISADVANTAGES

SECTION 7

ALTERNATIVE RECOMMENDATIONS

Form 20: ALTERNATIVE RECOMMENDATIONS FOR CONCLUSION

Complete one copy of this form for each study conclusion that you described on Form 16. For each conclusion develop a minimum of two alternative recommendations, with accompanying justification statements. Rank the recommendations according to priority, with the most desirable listed first. Use as many extra pages as you need. You will submit these recommendations to others in the group decision-making process for management systems improvement.

RECOMMENDATIONS	JUSTIFICATIONS
1.	
2.	
3.	





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